5.1
- Coord. Proof
- midsegment thm

5.2 - 5.4
Centers

3 ⊥ bisectors → Circumcenter
- equid. to vertices

3 ∠ bisectors → Incenter
- equid. to sides

3 medians → Centroid
Find coord. of centroid $\frac{2}{3}$ $\frac{1}{3}$ $\frac{1}{2}$

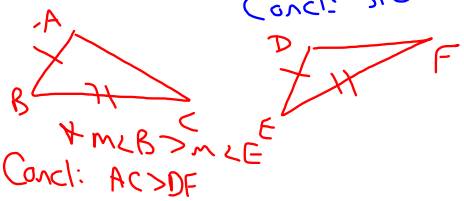
3 altitudes → Orthocenter

5.5 + 5.6
Ineq. in 1 △
5.10 If AB > AC
thm $m\angle C > m\angle B$
5.11 Converse

△ Inequ. thm
Is it △?
Range 3rd side?

33, 34 p332
Possible values for x

5.6 2 △s
Hinge thm
2 ≅ sides
included ∠ > incl. ∠
Concl: sides



If $m\angle B > m\angle E$
Concl: AC > DF

Converse of Hinge

Indirect Proof

Assume prove false